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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/067,758	02/08/2002	Chun-Geun Choi	P54562RE	8601
8439	7590	11/04/2005	EXAMINER	
ROBERT E. BUSHNELL 1522 K STREET NW SUITE 300 WASHINGTON, DC 20005-1202			LUU, MATTHEW	
			ART UNIT	PAPER NUMBER
			3663	

DATE MAILED: 11/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b>	<b>Application No.</b> 10/067,758	<b>Applicant(s)</b> CHOI, CHUN-GEUN	
	<b>Examiner</b> LUU MATTHEW	<b>Art Unit</b> 3663	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 13 October 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ They raise the issue of new matter (see NOTE below);
- (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
- The status of the claim(s) is (or will be) as follows:
- Claim(s) allowed: \_\_\_\_\_.
- Claim(s) objected to: \_\_\_\_\_.
- Claim(s) rejected: \_\_\_\_\_.
- Claim(s) withdrawn from consideration: \_\_\_\_\_.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
Please see the attached Response to Arguments.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_
13. ☐ Other: \_\_\_\_\_.

### ***Response to Arguments***

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

1. Regarding claim 9, the Applicant argues that the Kumaki does not teach "determining color gain and cut-off data according to the maximum and minimum color temperature".

Kumaki clearly discloses (Fig. 1) the color gain and cut-off data is proportional relative to the color temperature adjusting unit (5). For example, the color temperature adjusting unit (5) provides color temperature coefficients  $K_r$ ,  $K_g$  and  $K_b$  the gain control circuit (4) for respective primary color signals R, G and B. The gain control signals ( $A.(K_r.V_{cont})$ ,  $A.K_g.V_{cont}$ , and  $A.K_b.V_{cont}$ ) are supplied to the linear amplifiers (1R, 1G and 1B), respectively. See column 3, lines 46-56.

Kumaki further discloses the cut-off levels of the cathode ray tube are also relative to the color temperature coefficients  $K_r$ ,  $K_g$  and  $K_b$ . See column 3, line 65 to column 4, lines 9. Fig. 2A also shows exemplified relations of cut-off levels.

Therefore, based on the above teaching, the color gains of the amplifiers (1R, 1G and 1B) and cut-off levels are determined by the input color temperature coefficients  $K_r$ ,  $K_g$  and  $K_b$ .

Thus, since Kumaki mentions that a knob is handled to provide a color temperature by an operator (column 3, lines 43-45), it is obvious to a person of ordinary skill in the art to recognize that the operator can turn the knob to minimum or zero value or to the highest or maximum value of the knob to obtain the gain and cut-off data since the gain and cut-off data change proportionally to the input color temperature values. See column 5, lines 29-59; and column 7, lines 11-26.

2. Regarding claims 10 and 14, Kumaki discloses (Fig. 6) a digital to analog (DAC) converter for converting the color gain and cut-off values of the amplifier (OP1) (column 8, lines 6-13 and lines 50-53). It is well known in the art that the operational amplifier (OP) has gain and cut-off values. Furthermore, it is well known in the art that the function of a digital to analog converter is to converting the digital signals to analog signals. Furthermore, it is conventional in the art that digital/analog signal are interchangeably used in a display device.

3. Regarding claim 11, since Kumaki mentions that a knob is handled to provide a color temperature by an operator (column 3, lines 43-45), it is obvious to a person of ordinary skill in the art to recognize that the operator can turn the knob to minimum or zero value or to the highest or maximum value of the knob to obtain the gain and cut-off data since the gain and cut-off data change proportionally to the input color temperature values, wherein the minimum value and the maximum value of the knob of the knob is the initial color gain and cut-off values.

Furthermore, Kumaki clearly discloses (Fig. 1) the color gain and cut-off data is proportional relative to the color temperature adjusting unit (5). For example, the color temperature adjusting unit (5) provides color temperature coefficients  $K_r$ ,  $K_g$  and  $K_b$  the gain control circuit (4) for respective primary color signals R, G and B. The gain control signals ( $A.(K_r.V_{cont})$ ,  $A.K_g.V_{cont}$ , and  $A.K_b.V_{cont}$ ) are supplied to the linear amplifiers (1R, 1G and 1B), respectively. See column 3, lines 46-56.

Kumaki further discloses the cut-off levels of the cathode ray tube are also relative to the color temperature coefficients  $K_r$ ,  $K_g$  and  $K_b$ . See column 3, line 65 to column 4, lines 9. Fig. 2A also shows exemplified relations of cut-off levels.

Therefore, based on the above teaching, the color gains of the amplifiers (1R, 1G and 1B) and cut-off levels are determined by the input color temperature coefficients  $K_r$ ,  $K_g$  and  $K_b$ .

Thus, since Kumaki mentions that a knob is handled to provide a color temperature by an operator (column 3, lines 43-45), it is obvious to a person of ordinary skill in the art to recognize that the operator can turn the knob to minimum or zero value

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or to the highest or maximum value of the knob to obtain the gain and cut-off data since the gain and cut-off data change proportionally to the input color temperature values.

See column 5, lines 29-59; and column 7, lines 11-26.

4. Regarding claim 12, the Applicant argues that "Kumaki fails to teach or suggest inputting the selected value with the selected range". The examiner respectfully traverses. The user can adjust the knob of the color temperature adjusting unit (5) to a minimum value or zero value or to a highest value or maximum value. The maximum value and the minimum values define the temperature range.

5. Regarding claim 13, Kumaki clearly discloses establishing a range of temperature (Fig. 4) according to maximum and minimum color temperature values (column 6, lines 27-40, wherein the minimum value is zero and the maximum value is the highest value);

and calculating color gain and cut-off data according to the user selected value (column 3, line 43 to column 4, line 20).

Furthermore, Kumaki clearly discloses (Fig. 1) the color gain and cut-off data is proportional relative to the color temperature adjusting unit (5). For example, the color temperature adjusting unit (5) provides color temperature coefficients  $K_r$ ,  $K_g$  and  $K_b$  the gain control circuit (4) for respective primary color signals R, G and B. The gain control signals ( $A.(K_r.V_{cont})$ ,  $A.K_g.V_{cont}$ , and  $A.K_b.V_{cont}$ ) are supplied to the linear amplifiers (1R, 1G and 1B), respectively. See column 3, lines 46-56.

Kumaki further discloses the cut-off levels of the cathode ray tube are also relative to the color temperature coefficients  $K_r$ ,  $K_g$  and  $K_b$ . See column 3, line 65 to column 4, lines 9. Fig. 2A also shows exemplified relations of cut-off levels.

Therefore, based on the above teaching, the color gains of the amplifiers (1R, 1G and 1B) and cut-off levels are determined by the input color temperature coefficients  $K_r$ ,  $K_g$  and  $K_b$ .

Thus, since Kumaki mentions that a knob is handled to provide a color temperature by an operator (column 3, lines 43-45), it is obvious to a person of ordinary skill in the art to recognize that the operator can turn the knob to minimum or zero value or to the highest or maximum value of the knob to obtain the gain and cut-off data since the gain and cut-off data change proportionally to the input color temperature values. See column 5, lines 29-59; and column 7, lines 11-26.

6. Regarding claim 32, Kumaki discloses setting a range of temperature (Fig. 4) according to maximum and minimum color temperature values (column 6, lines 27-40, wherein the minimum value is zero and the maximum value is the highest value). Therefore, the maximum and the minimum is a predetermined range.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does

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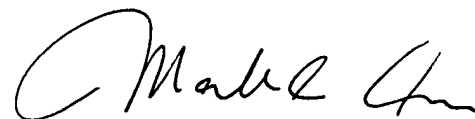
not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUU MATTHEW whose telephone number is (571) 272-7663. The examiner can normally be reached on Flexible Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JACK KEITH can be reached on (571) 272-7663. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M. Luu

A handwritten signature in black ink, appearing to read 'Matthew Luu', with a stylized flourish at the end.

**MATTHEW LUU**  
**PRIMARY EXAMINER**